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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,493	03/26/2004	Michael D. McKinley	2003.09.009.NS0	8138
23990	7590	12/19/2007		
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			EXAMINER NGUYEN, KHAI N	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 12/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,493

Applicant(s)

MCKINLEY ET AL.

Examiner

Khai N. Nguyen

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on September 25, 2007 has been entered. Claims 1, 8, and 16 have been amended. Claims 4 and 11 have been canceled. No claims have been added. Claims 1-3, 5-10, 12-20 are still pending in this application, with claims 1, 8, and 16 being independent

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3, 5-10 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindeberg et al. (U.S. Patent Number 6,094,479 hereinafter "Lindeberg") in view of Hebert et al. (U.S. Patent Number 6,088,749 hereinafter "Hebert").

Regarding claims 1 and 8, Lindeberg teaches a telecommunication network comprising a plurality of switches (Fig. 1 – 100), at least one of the switch comprising: a plurality of call control agent functions (Fig. 1 – 244, 248 Call Control Agent Function (CCAF)), at least two of the call control agent functions associated with different signaling protocols (Fig. 1 – 244, 248 CCAF, col. 6 line 51, lines 56-57 and col. 7 lines 5-8), the signaling protocols defining a plurality of signaling control primitives; and a first and second call control functions function (Fig. 1 – 243, 247 Call Control Function (CCF)) operable to control routing of telephone calls through the switch (Fig. 1 – 243, 247 CCF, col. 6 lines 52-55), wherein the first and second call control functions are accessed using an application programming interface (API) (col. 2 lines 8-11), the API comprising a plurality of classes defining objects representing the signaling control primitives, and each of the first and second call control functions is accessed by the other call control function using the API (col. 2 lines 8-11, col. 6 lines 33-36, and col. 7 lines 2-4).

Lindeberg does not specifically teach the signaling protocols defining a plurality of signaling control primitives and the API comprising a plurality of classes defining objects representing the signal control primitives.

However, Hebert teaches a telecommunication network with a universal API that can be used to support multiple signaling protocols (Fig. 1, col. 4 lines 3-11). The signaling protocols defining a plurality of signaling control primitives (FIG. 4, col. 8 lines 1-3) and the API comprising a plurality of classes defining objects representing the signal control primitives (Fig. 4, col. 8 lines 8-13, and col. 9 lines 49-58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the universal API to support different signaling protocols with a plurality of signaling control primitives, as taught by Herbert, into the Lindeberg system in order to improve the telecommunication network and enhance the call control agent functions by providing the support for a plurality of different signaling protocols.

Regarding claims 2-3, 9-10 and 18, Lindeberg discloses everything claimed as applied above (see claims 1, 8, and 16), but Lindeberg does not specifically teach the base class and a plurality of derived classes are derived from the base class. However, Hebert teaches a switch and a network, wherein: the plurality of classes comprises a base class and at least one derived class derived from the base class (Fig. 5 – 506-

MSG TYPE, column 10, lines 4-13); and wherein: the base class comprises the only base class in the API; and a plurality of derived classes are derived from the base class (Fig. 4, column 9, lines 49-53).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the base class and a plurality of derived classes, as taught by Herbert, into the Lindeberg system in order to improve the telecommunication network and enhance the call control functions accessed using API.

Regarding claims 5 and 12, Lindeberg teaches a switch (Fig. 1- 241,245) and a network (Fig. 1 – 200), wherein: the switch and the network comprises a plurality of sides, each side comprising a plurality of call control agent functions (Fig. 1 – 244, 248 CCAF) and a call control function (Fig. 1 -243, 247 CCF – col. 6 lines 50-51).

Regarding claims 6 and 13, Lindeberg teaches a switch (Fig.1 – 241, 245) and a network (Fig.1 – 200), wherein: the at least one switch further comprises a service switching function (Fig. 1 – 242, 246 Service Switching Function (SSF)), wherein the service switching function (Fig. 1 - 242, 246) is operable to facilitate communication with a service control point (Fig. 1 – 231, Service Control Point (SCP)); and the switch further comprising a service switching function, wherein the service switching function is operable to facilitate communication with a service control point (Fig. 1, col. 6 lines 45-49).

Regarding claims 7, 14 and 19, Lindeberg teaches wherein the signaling protocol comprises one of a Plain Old Telephony System (POTS) signaling protocol, a Session Initiation Protocol (SIP) signaling protocol, and an Integrated Services Digital Network User Part (ISUP) signaling protocol (col. 7 lines 5-7, and lines 42-43, i.e., signaling system 7 "ISUP").

Regarding claim 15, Lindberg teaches a network (Fig. 1 – 100 Public Telecommunication Network), wherein the at least one switch comprises one of a service switching point (Fig. 1 – 241 SSP) and a central office switch (Fig. 1 – 298, 299 – col. 6 lines 58-60, i.e., intervening nodes/networks "central office switch").

Regarding claim 16, Lindeberg teaches a method comprising:
identifying a plurality of signaling control primitives associated with a signaling protocol; identifying one or more first classes associated with an application programming interface (API) to a call control function in a switch (Fig. 1 – 241, 245 SSP – 243, 247 CCF - col. 2 lines 8-11, and col. 6 lines 49-50); extending one or more second classes associated with the API, the one or more first classes and the one or more second classes defining objects representing the signaling control primitives; and allowing access to the call control function using the signaling protocol from a second call control function (Fig. 1 – 243, 247 CCF – col. 6 lines 49-50, and col. 7 lines 2, i.e., signaling connection control part).

Lindeberg does not specifically teach a plurality of signaling control primitives and the API associated with a plurality of classes defining objects representing the signal control primitives.

However, Hebert teaches a telecommunication network with a universal API that can be used to support multiple signaling protocols (Fig. 1, col. 4 lines 3-11). The signaling protocols defining a plurality of signaling control primitives (FIG. 4, col. 8 lines 1-3) and the API comprising a plurality of classes defining objects representing the signal control primitives (Fig. 4, col. 8 lines 8-13, and col. 9 lines 49-58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the API associated with a plurality of classes defining objects with a plurality of signaling control primitives, as taught by Herbert, into the Lindeberg system in order to improve the telecommunication network and enhance the call control functions by providing the support for multiple different signaling protocols.

Regarding claim 17, Lindeberg teaches a method wherein the first and second classes facilitate access to the call control function (Fig. 1 - 243, 247 CCF) by a plurality of call control agent functions, at least two of the call control agent functions (Fig. 1 - 244, 248 CCAF) associated with different signaling protocols (Fig. 1, col. 6 lines 50-56). Lindeberg does not disclose the different signaling protocols. However, Herbert teaches

the use of different signaling protocols (Fig. 4, column 8, lines 30-38). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the use of different signaling protocols as taught by Herbert, into the Lindeberg method to enhance the call control functions by providing the support for multiple different signaling protocols.

Regarding claim 20, Lindeberg discloses everything claimed as applied above (see claim 16), but Lindeberg does not specifically teach one or more classes are associated with different signaling protocols. However, Hebert teaches a method wherein: the signaling protocol comprises a first signaling protocol; the one or more first classes are associated with both the first signaling protocol and a different second signaling protocol (Fig. 4 – 442a-442c, 444a-44c, column 8, lines 1-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the classes that associated with different signaling protocols, as taught by Herbert, into the Lindeberg method to enhance the call control functions by providing the support for multiple different signaling protocols.

Response to Arguments

5. Applicant's arguments with respect to claims 1-3, 5-10 and 12-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai N. Nguyen whose telephone number is (571) 270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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KNN
12/12/2007


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